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<110> Bayer Pharmaceuticals Corporation
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<120> Gene Expression Profiles and Methods of Use

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            35   40   45

Pro Asn Ser Met Val Val Glu His Pro Glu Phe Leu Lys Ala Gly Lys
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65   70   75   80

Val Pro Thr Asn Leu Tyr Gly Asp Phe Phe Thr Gly Asp Ala Tyr Val
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Ile Leu Lys Thr Val Gln Leu Arg Asn Gly Asn Leu Gln Tyr Asp Leu
            100   105   110

His Tyr Trp Leu Gly Asn Glu Cys Ser Gln Asp Glu Ser Gly Ala Ala
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Ala Ile Phe Thr Val Gln Leu Asp Asp Tyr Leu Asn Gly Arg Ala Val
    130   135   140

Gln His Arg Glu Val Gln Gly Phe Glu Ser Ala Thr Phe Leu Gly Tyr
145   150   155   160

Phe Lys Ser Gly Leu Lys Tyr Lys Lys Gly Gly Val Ala Ser Gly Phe
                165   170   175

Lys His Val Val Pro Asn Glu Val Val Val Gln Arg Leu Phe Gln Val
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Lys Gly Arg Arg Val Val Arg Ala Thr Glu Val Pro Val Ser Trp Glu
        195   200   205

Ser Phe Asn Asn Gly Asp Cys Phe Ile Leu Asp Leu Gly Asn Asn Ile
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225   230   235   240

Thr Gln Val Ser Lys Gly Ile Arg Asp Asn Glu Arg Ser Gly Arg Ala
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Arg Val His Val Ser Glu Glu Gly Thr Glu Pro Glu Ala Met Leu Gln
             260   265   270

Val Leu Gly Pro Lys Pro Ala Leu Pro Ala Gly Thr Glu Asp Thr Ala
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Lys Glu Asp Ala Ala Asn Arg Lys Leu Ala Lys Leu Tyr Lys Val Ser
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Asn Gly Ala Gly Thr Met Ser Val Ser Leu Val Ala Asp Glu Asn Pro
305   310   315   320

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Gly Lys Asp Gly Lys Ile Phe Val Trp Lys Gly Lys Gln Ala Asn Thr
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Glu Glu Arg Lys Ala Ala Leu Lys Thr Ala Ser Asp Phe Ile Thr Lys
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370   375   380

Glu Thr Pro Leu Phe Lys Gln Phe Phe Lys Asn Trp Arg Asp Pro Asp
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Gln Thr Asp Gly Leu Gly Leu Ser Tyr Leu Ser Ser His Ile Ala Asn
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Val Glu Arg Val Pro Phe Asp Ala Ala Thr Leu His Thr Ser Thr Ala
             420   425   430

Met Ala Ala Gln His Gly Met Asp Asp Asp Gly Thr Gly Gln Lys Gln
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Ile Trp Arg Ile Glu Gly Ser Asn Lys Val Pro Val Asp Pro Ala Thr
    450   455   460

Tyr Gly Gln Phe Tyr Gly Gly Asp Ser Tyr Ile Ile Leu Tyr Asn Tyr
465   470   475   480

Arg His Gly Gly Arg Gln Gly Gln Ile Ile Tyr Asn Trp Gln Gly Ala
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Gln Ser Thr Gln Asp Glu Val Ala Ala Ser Ala Ile Leu Thr Ala Gln
             500   505   510

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Leu Asp Glu Glu Leu Gly Gly Thr Pro Val Gln Ser Arg Val Val Gln
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Gly Lys Glu Pro Ala His Leu Met Ser Leu Phe Gly Gly Lys Pro Met
    530   535   540

Ile Ile Tyr Lys Gly Gly Thr Ser Arg Glu Gly Gly Gln Thr Ala Pro
545   550   555   560

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Arg Ala Val Glu Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp
            580   585   590

Ala Phe Val Leu Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr
        595   600   605

Gly Ala Ser Glu Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val
    610   615   620

Leu Arg Ala Gln Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly
625   630   635   640

Phe Trp Glu Ala Leu Gly Gly Lys Ala Ala Tyr Arg Thr Ser Pro Arg
            645   650   655

Leu Lys Asp Lys Lys Met Asp Ala His Pro Pro Arg Leu Phe Ala Cys
            660   665   670

Ser Asn Lys Ile Gly Arg Phe Val Ile Glu Glu Val Pro Gly Glu Leu
        675   680   685

Met Gln Glu Asp Leu Ala Thr Asp Asp Val Met Leu Leu Asp Thr Trp
    690   695   700

Asp Gln Val Phe Val Trp Val Gly Lys Asp Ser Gln Glu Glu Glu Lys
705   710   715   720

Thr Glu Ala Leu Thr Ser Ala Lys Arg Tyr Ile Glu Thr Asp Pro Ala
            725   730   735

Asn Arg Asp Arg Arg Thr Pro Ile Thr Val Val Lys Gln Gly Phe Glu
            740   745   750

Pro Pro Ser Phe Val Gly Trp Phe Leu Gly Trp Asp Asp Asp Tyr Trp
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770   775   780

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Gln Ser Lys Tyr Lys Ile Ala Ile Gln His Gln Val Leu Val Val Asn
        35   40   45

Gly Gly Glu Cys Met Ala Ala Asp Arg Arg Val Cys Thr Tyr Ser Ala
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Gly Thr Asp Thr Asn Pro Ile Phe Leu Phe Asn Lys Glu Met Ile Leu
65   70   75   80

Cys Asp Arg Pro Pro Ala Ile Pro Lys Thr Thr Phe Ser Thr Glu Asn
            85   90   95

Asp Met Glu Ile Lys Val Glu Glu Ser Leu Met Met Pro Ala Val Phe
            100   105   110

His Thr Val Ala Ser Arg Thr Gln Leu Ala Leu Glu Met Tyr Glu Val
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Ser Asn Ser Tyr Gln Lys Leu Leu Phe Lys Phe Glu Ser Ile Tyr Ser
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Asn Tyr Leu Gln Ser Ile Glu Asp Ile Lys Leu Lys Leu Thr His Leu
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Thr Arg His Ser Tyr Arg Glu Cys Leu Gly Arg Leu Asp Ser Leu Pro
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Glu His Glu Asp Ser Glu Lys Ala Glu Thr Lys Arg Ser Thr Glu Leu
225   230   235   240

Val Leu Ser Pro Asp Met Pro Arg Thr Thr Asn Glu Ser Leu Leu Thr
                    245   250   255

Ser Phe Pro Lys Ser Val Glu His Val Ser Pro Asp Thr Ala Asp Ala
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Glu Ser Gly Lys Glu Ile Arg Glu Ser Cys Gln Ser Thr Val His Gln
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Gln Asp Glu Thr Thr Ile Asp Thr Lys Asp Gly Asp Leu Pro Phe Phe
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305   310   315   320

Val Glu Ser Leu Val Arg Lys Cys Phe Asp Ser Met Ser Arg Leu Asp
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Pro Arg Ile Ile Arg Pro Phe Ile Ala Glu Cys Arg Gln Thr Ile Ala
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    370   375   380

Glu Gln Lys Glu Leu Ala Gln Gly Phe Leu Ala Asn Gln Lys Arg Ala
385   390   395   400

Glu Asn Leu Lys Asp Ala Ser Val Leu Pro Asp Leu Cys Leu Ser His
          405   410   415

Ala Asn Gln Leu Met Ile Met Leu Gln Asn His Arg Lys Leu Leu Asp
          420   425   430

Ile Lys Gln Lys Cys Thr Thr Ala Lys Gln Glu Leu Ala Asn Asn Leu
          435   440   445

His Val Arg Leu Lys Trp Cys Cys Phe Val Met Leu His Ala Asp Gln
450   455   460

Asp Gly Glu Lys Leu Gln Ala Leu Leu Arg Leu Val Ile Glu Leu Leu
465   470   475   480

Glu Arg Val Lys Ile Val Glu Ala Leu Ser Thr Val Pro Gln Met Tyr
              485   490   495

Cys Leu Ala Val Val Glu Val Val Arg Arg Lys Met Phe Ile Lys His
              500   505   510

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Tyr Arg Glu Trp Ala Gly Ala Leu Val Lys Asp Gly Lys Arg Leu Tyr
        515   520   525

Glu Ala Glu Lys Ser Lys Arg Glu Ser Phe Gly Lys Leu Phe Arg Lys
    530   535   540

Ser Phe Leu Arg Asn Arg Leu Phe Arg Gly Leu Asp Ser Trp Pro Pro
545   550   555   560

Ser Phe Cys Thr Gln Lys Pro Arg Lys Phe Asp Cys Glu Leu Pro Asp
            565   570   575

Ile Ser Leu Lys Asp Leu Gln Phe Leu Gln Ser Phe Cys Pro Ser Glu
            580   585   590

Val Gln Pro Phe Leu Arg Val Pro Leu Leu Cys Asp Phe Glu Pro Leu
        595   600   605

His Gln His Val Leu Ala Leu His Asn Leu Val Lys Ala Ala Gln Ser
    610   615   620

Leu Asp Glu Met Ser Gln Thr Ile Thr Asp Leu Leu Ser Glu Gln Lys
625   630   635   640

Ala Ser Val Ser Gln Thr Ser Pro Gln Ser Ala Ser Ser Pro Arg Met
            645   650   655

Glu Ser Thr Ala Gly Ile Thr Thr Thr Ser Pro Arg Thr Pro Pro
            660   665   670

Pro Leu Thr Val Gln Asp Pro Leu Cys Pro Ala Val Cys Pro Leu Glu
        675   680   685

Glu Leu Ser Pro Asp Ser Ile Asp Ala His Thr Phe Asp Phe Glu Thr
    690   695   700

Ile Pro His Pro Asn Ile Glu Gln Thr Ile His Gln Val Ser Leu Asp
705   710   715   720

Leu Asp Ser Leu Ala Glu Ser Pro Glu Ser Asp Phe Met Ser Ala Val
            725   730   735

Asn Glu Phe Val Ile Glu Glu Asn Leu Ser Ser Pro Asn Pro Ile Ser
            740   745   750

Asp Pro Gln Ser Pro Glu Met Met Val Glu Ser Leu Tyr Ser Ser Val
        755   760   765

Ile Asn Ala Ile Asp Ser Arg Arg Met Gln Asp Thr Asn Val Cys Gly
770   775   780

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Lys Glu Asp Phe Gly Asp His Thr Ser Leu Asn Val Gln Leu Glu Arg
785   790   795   800

Cys Arg Val Val Ala Gln Asp Ser His Phe Ser Ile Gln Thr Ile Lys
                 805   810   815

Glu Asp Leu Cys His Phe Arg Thr Phe Val Gln Lys Glu Gln Cys Asp
             820   825   830

Phe Ser Asn Ser Leu Lys Cys Thr Ala Val Glu Ile Arg Asn Ile Ile
         835   840   845

Glu Lys Val Lys Cys Ser Leu Glu Ile Thr Leu Lys Glu Lys His Gln
    850   855   860

Lys Glu Leu Leu Ser Leu Lys Asn Glu Tyr Glu Gly Lys Leu Asp Gly
865   870   875   880

Leu Ile Lys Glu Thr Glu Glu Asn Glu Asn Lys Ile Lys Lys Leu Lys
             885   890   895

Gly Glu Leu Val Cys Leu Glu Glu Val Leu Gln Asn Lys Asp Asn Glu
         900   905   910

Phe Ala Leu Val Lys His Glu Lys Glu Ala Val Ile Cys Leu Gln Asn
    915   920   925

Glu Lys Asp Gln Lys Leu Leu Glu Met Glu Asn Ile Met His Ser Gln
    930   935   940

Asn Cys Glu Ile Lys Glu Leu Lys Gln Ser Arg Glu Ile Val Leu Glu
945   950   955   960

Asp Leu Lys Lys Leu His Val Glu Asn Asp Glu Lys Leu Gln Leu Leu
             965   970   975

Arg Ala Glu Leu Gln Ser Leu Glu Gln Ser His Leu Lys Glu Leu Glu
         980   985   990

Asp Thr Leu Gln Val Arg His Ile Gln Glu Phe Glu Lys Val Met Thr
    995   1000   1005

Asp His Arg Val Ser Leu Glu Glu Leu Lys Lys Glu Asn Gln Gln
    1010   1015   1020

Ile Ile Asn Gln Ile Gln Glu Ser His Ala Glu Ile Ile Gln Glu
    1025   1030   1035

Lys Glu Lys Gln Leu Gln Glu Leu Lys Leu Lys Val Ser Asp Leu
    1040   1045   1050

Page 33

Ser Asp Thr Arg Cys Lys Leu Glu Val Glu Leu Ala Leu Lys Glu
    1055   1060   1065

Ala Glu Thr Asp Glu Ile Lys Ile Leu Leu Glu Glu Ser Arg Ala
    1070   1075   1080

Gln Gln Lys Glu Thr Leu Lys Ser Leu Leu Glu Gln Glu Thr Glu
    1085   1090   1095

Asn Leu Arg Thr Glu Ile Ser Lys Leu Asn Gln Lys Ile Gln Asp
    1100   1105   1110

Asn Asn Glu Asn Tyr Gln Val Gly Leu Ala Glu Leu Arg Thr Leu
    1115   1120   1125

Met Thr Ile Glu Lys Asp Gln Cys Ile Ser Glu Leu Ile Ser Arg
    1130   1135   1140

His Glu Glu Glu Ser Asn Ile Leu Lys Ala Glu Leu Asn Lys Val
    1145   1150   1155

Thr Ser Leu His Asn Gln Ala Phe Glu Ile Glu Lys Asn Leu Lys
    1160   1165   1170

Glu Gln Ile Ile Glu Leu Gln Ser Lys Leu Asp Ser Glu Leu Ser
    1175   1180   1185

Ala Leu Glu Arg Gln Lys Asp Glu Lys Ile Thr Gln Gln Glu Glu
    1190   1195   1200

Lys Tyr Glu Ala Ile Ile Gln Asn Leu Glu Lys Asp Arg Gln Lys
    1205   1210   1215

Leu Val Ser Ser Gln Glu Gln Asp Arg Glu Gln Leu Ile Gln Lys
    1220   1225   1230

Leu Asn Cys Glu Lys Asp Glu Ala Ile Gln Thr Ala Leu Lys Glu
    1235   1240   1245

Phe Lys Leu Glu Arg Glu Val Val Glu Lys Glu Leu Leu Glu Lys
    1250   1255   1260

Val Lys His Leu Glu Asn Gln Ile Ala Lys Ser Pro Ala Ile Asp
    1265   1270   1275

Ser Thr Arg Gly Asp Ser Ser Ser Leu Val Ala Glu Leu Gln Glu
    1280   1285   1290

Lys Leu Gln Glu Glu Lys Ala Lys Phe Leu Glu Gln Leu Glu Glu
    1295   1300   1305

Page 34

Gln Glu Lys Arg Lys Asn Glu Glu Met Gln Asn Val Arg Thr Ser
    1310   1315   1320

Leu Ile Ala Glu Gln Gln Thr Asn Phe Asn Thr Val Leu Thr Arg
    1325   1330   1335

Glu Lys Met Arg Lys Glu Asn Ile Ile Asn Asp Leu Ser Asp Lys
    1340   1345   . 1350

Leu Lys Ser Thr Met Gln Gln Gln Glu Arg Asp Lys Asp Leu Ile
    1355   1360   1365

Glu Ser Leu Ser Glu Asp Arg Ala Arg Leu Leu Glu Glu Lys Lys
    1370   1375   1380

Lys Leu Glu Glu Glu Val Ser Lys Leu Arg Ser Ser Ser Phe Val
    1385   1390   1395

Pro Ser Pro Tyr Val Ala Thr Ala Pro Glu Leu Tyr Gly Ala Cys
    1400   1405   1410

Ala Pro Glu Leu Pro Gly Glu Ser Asp Arg Ser Ala Val Glu Thr
    1415   1420   1425

Ala Asp Glu Gly Arg Val Asp Ser Ala Met Glu Thr Ser Met Met
    1430   1435   1440

Ser Val Gln Glu Asn Ile His Met Leu Ser Glu Glu Lys Gln Arg
    1445   1450   1455

Ile Met Leu Leu Glu Arg Thr Leu Gln Leu Lys Glu Glu Glu Asn
    1460   1465   1470

Lys Arg Leu Asn Gln Arg Leu Met Ser Gln Ser Met Ser Ser Val
    1475   1480   1485

Ser Ser Arg His Ser Glu Lys Ile Ala Ile Arg Asp Phe Gln Val
    1490   1495   1500

Gly Asp Leu Val Leu Ile Ile Leu Asp Glu Arg His Asp Asn Tyr
    1505   1510   1515

Val Leu Phe Thr Val Ser Pro Thr Leu Tyr Phe Leu His Ser Glu
    1520   1525   1530

Ser Leu Pro Ala Leu Asp Leu Lys Pro Gly Glu Gly Ala Ser Gly
    1535   1540   1545

Ala Ser Arg Arg Pro Trp Val Leu Gly Lys Val Met Glu Lys Glu
    1550   1555   1560

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```
Tyr Cys Gln Ala Lys Lys Ala Gln Asn Arg Phe Lys Val Pro Leu
    1565              1570              1575

Gly Thr Lys Phe Tyr Arg Val Lys Ala Val Ser Trp Asn Lys Lys
    1580              1585              1590

Val
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<210> 22
<211> 164
<212> PRT
<213> Homo sapiens

<400> 22

```
Met Ser Glu Pro Ala Gly Asp Val Arg Gln Asn Pro Cys Gly Ser Lys
1            5                10               15

Ala Cys Arg Arg Leu Phe Gly Pro Val Asp Ser Glu Gln Leu Ser Arg
        20               25               30

Asp Cys Asp Ala Leu Met Ala Gly Cys Ile Gln Glu Ala Arg Glu Arg
        35               40               45

Trp Asn Phe Asp Phe Val Thr Glu Thr Pro Leu Glu Gly Asp Phe Ala
    50               55               60

Trp Glu Arg Val Arg Gly Leu Gly Leu Pro Lys Leu Tyr Leu Pro Thr
65               70               75                   80

Gly Pro Arg Arg Gly Arg Asp Glu Leu Gly Gly Gly Arg Arg Pro Gly
            85               90                   95

Thr Ser Pro Ala Leu Leu Gln Gly Thr Ala Glu Glu Asp His Val Asp
            100              105              110

Leu Ser Leu Ser Cys Thr Leu Val Pro Arg Ser Gly Glu Gln Ala Glu
        115              120              125

Gly Ser Pro Gly Gly Pro Gly Asp Ser Gln Gly Arg Lys Arg Arg Gln
    130              135              140

Thr Ser Met Thr Asp Phe Tyr His Ser Lys Arg Arg Leu Ile Phe Ser
145              150              155              160

Lys Arg Lys Pro
```

<210> 23
<211> 313
<212> PRT
<213> Homo sapiens

<400> 23

Met 1	Pro	Val	Ala	Gly 5	Ser	Glu	Leu	Pro	Arg 10	Arg	Pro	Leu	Pro 15	Pro	Ala

Met Pro Val Ala Gly Ser Glu Leu Pro Arg Arg Pro Leu Pro Pro Ala
1   5   10   15

Ala Gln Glu Arg Asp Ala Glu Pro Arg Pro Pro His Gly Glu Leu Gln
          20   25   30

Tyr Leu Gly Gln Ile Gln His Ile Leu Arg Cys Gly Val Arg Lys Asp
          35   40   45

Asp Arg Thr Gly Thr Gly Thr Leu Ser Val Phe Gly Met Gln Ala Arg
     50   55   60

Tyr Ser Leu Arg Asp Glu Phe Pro Leu Leu Thr Thr Lys Arg Val Phe
65   70   75   80

Trp Lys Gly Val Leu Glu Glu Leu Leu Trp Phe Ile Lys Gly Ser Thr
               85   90   95

Asn Ala Lys Glu Leu Ser Ser Lys Gly Val Lys Ile Trp Asp Ala Asn
          100   105   110

Gly Ser Arg Asp Phe Leu Asp Ser Leu Gly Phe Ser Thr Arg Glu Glu
          115   120   125

Gly Asp Leu Gly Pro Val Tyr Gly Phe Gln Trp Arg His Phe Gly Ala
     130   135   140

Glu Tyr Arg Asp Met Glu Ser Asp Tyr Ser Gly Gln Gly Val Asp Gln
145   150   155   160

Leu Gln Arg Val Ile Asp Thr Ile Lys Thr Asn Pro Asp Asp Arg Arg
               165   170   175

Ile Ile Met Cys Ala Trp Asn Pro Arg Asp Leu Pro Leu Met Ala Leu
          180   185   190

Pro Pro Cys His Ala Leu Cys Gln Phe Tyr Val Val Asn Ser Glu Leu
          195   200   205

Ser Cys Gln Leu Tyr Gln Arg Ser Gly Asp Met Gly Leu Gly Val Pro
     210   215   220

Phe Asn Ile Ala Ser Tyr Ala Leu Leu Thr Tyr Met Ile Ala His Ile
225   230   235   240

Thr Gly Leu Lys Pro Gly Asp Phe Ile His Thr Leu Gly Asp Ala His
               245   250   255

Ile Tyr Leu Asn His Ile Glu Pro Leu Lys Ile Gln Leu Gln Arg Glu
          260   265   270

Pro Arg Pro Phe Pro Lys Leu Arg Ile Leu Arg Lys Val Glu Lys Ile
        275   280   285

Asp Asp Phe Lys Ala Glu Asp Phe Gln Ile Glu Gly Tyr Asn Pro His
    290   295   300

Pro Thr Ile Lys Met Glu Met Ala Val
305   310

<210>   24
<211>   179
<212>   PRT
<213>   Homo sapiens

<400>   24

Met Ala Ser Gln Asn Arg Asp Pro Ala Ala Thr Ser Val Ala Ala Ala
1   5   10   15

Arg Lys Gly Ala Glu Pro Ser Gly Gly Ala Ala Arg Gly Pro Val Gly
            20   25   30

Lys Arg Leu Gln Gln Glu Leu Met Thr Leu Met Met Ser Gly Asp Lys
        35   40   45

Gly Ile Ser Ala Phe Pro Glu Ser Asp Asn Leu Phe Lys Trp Val Gly
    50   55   60

Thr Ile His Gly Ala Ala Gly Thr Val Tyr Glu Asp Leu Arg Tyr Lys
65   70   75   80

Leu Ser Leu Glu Phe Pro Ser Gly Tyr Pro Tyr Asn Ala Pro Thr Val
            85   90   95

Lys Phe Leu Thr Pro Cys Tyr His Pro Asn Val Asp Thr Gln Gly Asn
            100   105   110

Ile Cys Leu Asp Ile Leu Lys Glu Lys Trp Ser Ala Leu Tyr Asp Val
        115   120   125

Arg Thr Ile Leu Leu Ser Ile Gln Ser Leu Leu Gly Glu Pro Asn Ile
130   135   140

Asp Ser Pro Leu Asn Thr His Ala Ala Glu Leu Trp Lys Asn Pro Thr
145   150   155   160

Ala Phe Lys Lys Tyr Leu Gln Glu Thr Tyr Ser Lys Gln Val Thr Ser
                165   170   175

Gln Glu Pro

<210> 25
<211> 736
<212> PRT
<213> Homo sapiens

<400> 25

Met Lys Lys Ser Arg Ser Val Met Thr Val Met Ala Asp Asp Asn Val
1   5   10   15

Lys Asp Tyr Phe Glu Cys Ser Leu Ser Lys Ser Tyr Ser Ser Ser Ser
            20   25   30

Asn Thr Leu Gly Ile Asp Leu Trp Arg Gly Arg Arg Cys Cys Ser Gly
        35   40   45

Asn Leu Gln Leu Pro Pro Leu Ser Gln Arg Gln Ser Glu Arg Ala Arg
    50   55   60

Thr Pro Glu Gly Asp Gly Ile Ser Arg Pro Thr Thr Leu Pro Leu Thr
65   70   75   80

Thr Leu Pro Ser Ile Ala Ile Thr Thr Val Ser Gln Glu Cys Phe Asp
                85   90   95

Val Glu Asn Gly Pro Ser Pro Gly Arg Ser Pro Leu Asp Pro Gln Ala
            100   105   110

Ser Ser Ser Ala Gly Leu Val Leu His Ala Thr Phe Pro Gly His Ser
    115   120   125

Gln Arg Arg Glu Ser Phe Leu Tyr Arg Ser Asp Ser Asp Tyr Asp Leu
    130   135   140

Ser Pro Lys Ala Met Ser Arg Asn Ser Ser Leu Pro Ser Glu Gln His
145   150   155   160

Gly Asp Asp Leu Ile Val Thr Pro Phe Ala Gln Val Leu Ala Ser Leu
                165   170   175

Arg Ser Val Arg Asn Asn Phe Thr Ile Leu Thr Asn Leu His Gly Thr
            180   185   190

Ser Asn Lys Arg Ser Pro Ala Ala Ser Gln Pro Pro Val Ser Arg Val
    195   200   205

Asn Pro Gln Glu Glu Ser Tyr Gln Lys Leu Ala Met Glu Thr Leu Glu
210   215   220

Glu Leu Asp Trp Cys Leu Asp Gln Leu Glu Thr Ile Gln Thr Tyr Arg
225   230   235   240

Ser Val Ser Glu Met Ala Ser Asn Lys Phe Lys Arg Met Leu Asn Arg
                245   250   255

Glu Leu Thr His Leu Ser Glu Met Ser Arg Ser Gly Asn Gln Val Ser
            260   265   270

Glu Tyr Ile Ser Asn Thr Phe Leu Asp Lys Gln Asn Asp Val Glu Ile
        275   280   285

Pro Ser Pro Thr Gln Lys Asp Arg Glu Lys Lys Lys Gln Gln Leu
    290   295   300

Met Thr Gln Ile Ser Gly Val Lys Lys Leu Met His Ser Ser Ser Leu
305   310   315   320

Asn Asn Thr Ser Ile Ser Arg Phe Gly Val Asn Thr Glu Asn Glu Asp
            325   330   335

His Leu Ala Lys Glu Leu Glu Asp Leu Asn Lys Trp Gly Leu Asn Ile
        340   345   350

Phe Asn Val Ala Gly Tyr Ser His Asn Arg Pro Leu Thr Cys Ile Met
    355   360   365

Tyr Ala Ile Phe Gln Glu Arg Asp Leu Leu Lys Thr Phe Arg Ile Ser
370   375   380

Ser Asp Thr Phe Ile Thr Tyr Met Met Thr Leu Glu Asp His Tyr His
385   390   395   400

Ser Asp Val Ala Tyr His Asn Ser Leu His Ala Ala Asp Val Ala Gln
        405   410   415

Ser Thr His Val Leu Leu Ser Thr Pro Ala Leu Asp Ala Val Phe Thr
        420   425   430

Asp Leu Glu Ile Leu Ala Ala Ile Phe Ala Ala Ala Ile His Asp Val
    435   440   445

Asp His Pro Gly Val Ser Asn Gln Phe Leu Ile Asn Thr Asn Ser Glu
450   455   460

Leu Ala Leu Met Tyr Asn Asp Glu Ser Val Leu Glu Asn His His Leu
465   470   475   480

Ala Val Gly Phe Lys Leu Leu Gln Glu Glu His Cys Asp Ile Phe Met
        485   490   495

Asn Leu Thr Lys Lys Gln Arg Gln Thr Leu Arg Lys Met Val Ile Asp
        500   505   510

Met Val Leu Ala Thr Asp Met Ser Lys His Met Ser Leu Leu Ala Asp
        515   520   525

Leu Lys Thr Met Val Glu Thr Lys Lys Val Thr Ser Ser Gly Val Leu
        530   535   540

Leu Leu Asp Asn Tyr Thr Asp Arg Ile Gln Val Leu Arg Asn Met Val
545   550   555   560

His Cys Ala Asp Leu Ser Asn Pro Thr Lys Ser Leu Glu Leu Tyr Arg
            565   570   575

Gln Trp Thr Asp Arg Ile Met Glu Glu Phe Phe Gln Gln Gly Asp Lys
            580   585   590

Glu Arg Glu Arg Gly Met Glu Ile Ser Pro Met Cys Asp Lys His Thr
        595   600   605

Ala Ser Val Glu Lys Ser Gln Val Gly Phe Ile Asp Tyr Ile Val His
    610   615   620

Pro Leu Trp Glu Thr Trp Ala Asp Leu Val Gln Pro Asp Ala Gln Asp
625   630   635   640

Ile Leu Asp Thr Leu Glu Asp Asn Arg Asn Trp Tyr Gln Ser Met Ile
            645   650   655

Pro Gln Ser Pro Ser Pro Pro Leu Asp Glu Gln Asn Arg Asp Cys Gln
            660   665   670

Gly Leu Met Glu Lys Phe Gln Phe Glu Leu Thr Leu Asp Glu Glu Asp
        675   680   685

Ser Glu Gly Pro Glu Lys Glu Gly Glu Gly His Ser Tyr Phe Ser Ser
    690   695   700

Thr Lys Thr Leu Cys Val Ile Asp Pro Glu Asn Arg Asp Ser Leu Gly
705   710   715   720

Glu Thr Asp Ile Asp Ile Ala Thr Glu Asp Lys Ser Pro Val Asp Thr
            725   730   735

<210> 26
<211> 97
<212> PRT
<213> Homo sapiens

<400> 26

Met Cys Ser Ser Leu Glu Gln Ala Leu Ala Val Leu Val Thr Thr Phe
1   5   10   15

His Lys Tyr Ser Cys Gln Glu Gly Asp Lys Phe Lys Leu Ser Lys Gly
                              Page 41

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                20                    25                     30

Glu Met Lys Glu Leu Leu His Lys Glu Leu Pro Ser Phe Val Gly Glu
        35                40                45

Lys Val Asp Glu Glu Gly Leu Lys Lys Leu Met Gly Ser Leu Asp Glu
    50                55                60

Asn Ser Asp Gln Gln Val Asp Phe Gln Glu Tyr Ala Val Phe Leu Ala
65                70                75                80

Leu Ile Thr Val Met Cys Asn Asp Phe Phe Gln Gly Cys Pro Asp Arg
                85                90                95

Pro
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<210>  27
<211>  271
<212>  PRT
<213>  Homo sapiens

<400>  27

Met Phe Arg Asp Phe Gly Glu Pro Gly Pro Ser Ser Gly Asn Gly Gly
1               5                10                15

Gly Tyr Gly Gly Pro Ala Gln Pro Pro Ala Ala Ala Gln Ala Ala Gln
            20                25                30

Gln Lys Phe His Leu Val Pro Ser Ile Asn Thr Met Ser Gly Ser Gln
        35                40                45

Glu Leu Gln Trp Met Val Gln Pro His Phe Leu Gly Pro Ser Ser Tyr
    50                55                60

Pro Arg Pro Leu Thr Tyr Pro Gln Tyr Ser Pro Pro Gln Pro Arg Pro
65                70                75                80

Gly Val Ile Arg Ala Leu Gly Pro Pro Pro Gly Val Arg Arg Arg Pro
                85                90                95

Cys Glu Gln Ile Ser Pro Glu Glu Glu Arg Arg Arg Val Arg Arg
            100               105               110

Glu Arg Asn Lys Leu Ala Ala Ala Lys Cys Arg Asn Arg Arg Lys Glu
        115               120               125

Leu Thr Asp Phe Leu Gln Ala Glu Thr Asp Lys Leu Glu Asp Glu Lys
    130               135               140

Ser Gly Leu Gln Arg Glu Ile Glu Glu Leu Gln Lys Gln Lys Glu Arg
145               150               155               160
```

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```
Leu Glu Leu Val Leu Glu Ala His Arg Pro Ile Cys Lys Ile Pro Glu
            165             170             175

Gly Ala Lys Glu Gly Asp Thr Gly Ser Thr Ser Gly Thr Ser Ser Pro
            180             185             190

Pro Ala Pro Cys Arg Pro Val Pro Cys Ile Ser Leu Ser Pro Gly Pro
            195             200             205

Val Leu Glu Pro Glu Ala Leu His Thr Pro Thr Leu Met Thr Thr Pro
    210             215             220

Ser Leu Thr Pro Phe Thr Pro Ser Leu Val Phe Thr Tyr Pro Ser Thr
225             230             235             240

Pro Glu Pro Cys Ala Ser Ala His Arg Lys Ser Ser Ser Ser Ser Gly
            245             250             255

Asp Pro Ser Ser Asp Pro Leu Gly Ser Pro Thr Leu Leu Ala Leu
            260             265             270
```

```
<210>   28
<211>   410
<212>   PRT
<213>   Homo sapiens

<400>   28
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```
Met Ala Phe Leu Gly Leu Phe Ser Leu Leu Val Leu Gln Ser Met Ala
1               5               10              15

Thr Gly Ala Thr Phe Pro Glu Glu Ala Ile Ala Asp Leu Ser Val Asn
            20              25              30

Met Tyr Asn Arg Leu Arg Ala Thr Gly Glu Asp Glu Asn Ile Leu Phe
        35              40              45

Ser Pro Leu Ser Ile Ala Leu Ala Met Gly Met Met Glu Leu Gly Ala
    50              55              60

Gln Gly Ser Thr Gln Lys Glu Ile Arg His Ser Met Gly Tyr Asp Ser
65              70              75              80

Leu Lys Asn Gly Glu Glu Phe Ser Phe Leu Lys Glu Phe Ser Asn Met
            85              90              95

Val Thr Ala Lys Glu Ser Gln Tyr Val Met Lys Ile Ala Asn Ser Leu
            100             105             110

Phe Val Gln Asn Gly Phe His Val Asn Glu Glu Phe Leu Gln Met Met
    115             120             125
```

Page 43

Lys Lys Tyr Phe Asn Ala Ala Val Asn His Val Asp Phe Ser Gln Asn
    130   135   140

Val Ala Val Ala Asn Tyr Ile Asn Lys Trp Val Glu Asn Asn Thr Asn
145   150   155   160

Asn Leu Val Lys Asp Leu Val Ser Pro Arg Asp Phe Asp Ala Ala Thr
            165   170   175

Tyr Leu Ala Leu Ile Asn Ala Val Tyr Phe Lys Gly Asn Trp Lys Ser
            180   185   190

Gln Phe Arg Pro Glu Asn Thr Arg Thr Phe Ser Phe Thr Lys Asp Asp
        195   200   205

Glu Ser Glu Val Gln Ile Pro Met Met Tyr Gln Gln Gly Glu Phe Tyr
    210   215   220

Tyr Gly Glu Phe Ser Asp Gly Ser Asn Glu Ala Gly Gly Ile Tyr Gln
225   230   235   240

Val Leu Glu Ile Pro Tyr Glu Gly Asp Glu Ile Ser Met Met Leu Val
            245   250   255

Leu Ser Arg Gln Glu Val Pro Leu Ala Thr Leu Glu Pro Leu Val Lys
        260   265   270

Ala Gln Leu Val Glu Glu Trp Ala Asn Ser Val Lys Lys Gln Lys Val
        275   280   285

Glu Val Tyr Leu Pro Arg Phe Thr Val Glu Gln Glu Ile Asp Leu Lys
    290   295   300

Asp Val Leu Lys Ala Leu Gly Ile Thr Glu Ile Phe Ile Lys Asp Ala
305   310   315   320

Asn Leu Thr Gly Leu Ser Asp Asn Lys Glu Ile Phe Leu Ser Lys Ala
            325   330   335

Ile His Lys Ser Phe Leu Glu Val Asn Glu Glu Gly Ser Glu Ala Ala
            340   345   350

Ala Val Ser Gly Met Ile Ala Ile Ser Arg Met Ala Val Leu Tyr Pro
        355   360   365

Gln Val Ile Val Asp His Pro Phe Phe Phe Leu Ile Arg Asn Arg Arg
    370   375   380

Thr Gly Thr Ile Leu Phe Met Gly Arg Val Met His Pro Glu Thr Met
385   390   395   400

Page 44

Asn Thr Ser Gly His Asp Phe Glu Glu Leu
                405   410

<210>   29
<211>   280
<212>   PRT
<213>   Homo sapiens

<400>   29

Met Leu Ser Ala Val Ala Arg Gly Tyr Gln Gly Trp Phe His Pro Cys
1   5   10   15

Ala Arg Leu Ser Val Arg Met Ser Ser Thr Gly Ile Asp Arg Lys Gly
            20   25   30

Val Leu Ala Asn Arg Val Ala Val Val Thr Gly Ser Thr Ser Gly Ile
        35   40   45

Gly Phe Ala Ile Ala Arg Arg Leu Ala Arg Asp Gly Ala His Val Val
    50   55   60

Ile Ser Ser Arg Lys Gln Gln Asn Val Asp Arg Ala Met Ala Lys Leu
65   70   75   80

Gln Gly Glu Gly Leu Ser Val Ala Gly Ile Val Cys His Val Gly Lys
            85   90   95

Ala Glu Asp Arg Glu Gln Leu Val Ala Lys Ala Leu Glu His Cys Gly
            100   105   110

Gly Val Asp Phe Leu Val Cys Ser Ala Gly Val Asn Pro Leu Val Gly
        115   120   125

Ser Thr Leu Gly Thr Ser Glu Gln Ile Trp Asp Lys Ile Leu Ser Val
    130   135   140

Asn Val Lys Ser Pro Ala Leu Leu Leu Ser Gln Leu Leu Pro Tyr Met
145   150   155   160

Glu Asn Arg Arg Gly Ala Val Ile Leu Val Ser Ser Ile Ala Ala Tyr
            165   170   175

Asn Pro Val Val Ala Leu Gly Val Tyr Asn Val Ser Lys Thr Ala Leu
        180   185   190

Leu Gly Leu Thr Arg Thr Leu Ala Leu Glu Leu Ala Pro Lys Asp Ile
    195   200   205

Arg Val Asn Cys Val Val Pro Gly Ile Ile Lys Thr Asp Phe Ser Lys
210   215   220

Page 45

Val Phe His Gly Asn Glu Ser Leu Trp Lys Asn Phe Lys Glu His His
225   230   235   240

Gln Leu Gln Arg Ile Gly Glu Ser Glu Asp Cys Ala Gly Ile Val Ser
                245   250   255

Phe Leu Cys Ser Pro Asp Ala Ser Tyr Val Asn Gly Glu Asn Ile Ala
                260   265   270

Val Ala Gly Tyr Ser Thr Arg Leu
                275   280

<210> 30
<211> 193
<212> PRT
<213> Homo sapiens

<400> 30

Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu
1   5   10   15

Leu Ala Ala Pro Ala Gln Ala His Leu Lys Lys Pro Ser Gln Leu Ser
                20   25   30

Ser Phe Ser Trp Asp Asn Cys Asp Glu Gly Lys Asp Pro Ala Val Ile
                35   40   45

Arg Ser Leu Thr Leu Glu Pro Asp Pro Ile Ile Val Pro Gly Asn Val
        50   55   60

Thr Leu Ser Val Met Gly Ser Thr Ser Val Pro Leu Ser Ser Pro Leu
65   70   75   80

Lys Val Asp Leu Val Leu Glu Lys Glu Val Ala Gly Leu Trp Ile Lys
                85   90   95

Ile Pro Cys Thr Asp Tyr Ile Gly Ser Cys Thr Phe Glu His Phe Cys
                100   105   110

Asp Val Leu Asp Met Leu Ile Pro Thr Gly Glu Pro Cys Pro Glu Pro
            115   120   125

Leu Arg Thr Tyr Gly Leu Pro Cys His Cys Pro Phe Lys Glu Gly Thr
    130   135   140

Tyr Ser Leu Pro Lys Ser Glu Phe Val Val Pro Asp Leu Glu Leu Pro
145   150   155   160

Ser Trp Leu Thr Thr Gly Asn Tyr Arg Ile Glu Ser Val Leu Ser Ser
                165   170   175

Ser Gly Lys Arg Leu Gly Cys Ile Lys Ile Ala Ala Ser Leu Lys Gly
                      Page 46

```
            180                     185                     190
```

Ile

```
<210>   31
<211>   187
<212>   PRT
<213>   Homo sapiens

<400>   31
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```
Met Ser Glu Met Ala Glu Leu Ser Glu Leu Tyr Glu Glu Ser Ser Asp
1               5                   10                  15
```

```
Leu Gln Met Asp Val Met Pro Gly Glu Gly Asp Leu Pro Gln Met Glu
                20                  25                  30
```

```
Val Gly Ser Gly Ser Arg Glu Leu Ser Leu Arg Pro Ser Arg Ser Gly
            35                  40                  45
```

```
Ala Gln Gln Leu Glu Glu Glu Gly Pro Met Glu Glu Glu Glu Ala Gln
        50                  55                  60
```

```
Pro Met Ala Ala Pro Glu Gly Lys Arg Ser Leu Ala Asn Gly Pro Asn
65                  70                  75                  80
```

```
Ala Gly Glu Gln Pro Gly Gln Val Ala Gly Ala Asp Phe Glu Ser Glu
                85                  90                  95
```

```
Asp Glu Gly Glu Glu Phe Asp Asp Trp Glu Asp Asp Tyr Asp Tyr Pro
            100                 105                 110
```

```
Glu Glu Glu Gln Leu Ser Gly Ala Gly Tyr Arg Val Ser Ala Ala Leu
        115                 120                 125
```

```
Glu Glu Ala Asp Lys Met Phe Leu Arg Thr Arg Glu Pro Ala Leu Asp
    130                 135                 140
```

```
Gly Gly Phe Gln Met His Tyr Glu Lys Thr Pro Phe Asp Gln Leu Ala
145                 150                 155                 160
```

```
Phe Ile Glu Glu Leu Phe Ser Leu Met Val Val Asn Arg Leu Thr Glu
                165                 170                 175
```

```
Glu Leu Gly Cys Asp Glu Ile Ile Asp Arg Glu
            180                 185
```

```
<210>   32
<211>   2328
<212>   PRT
<213>   Homo sapiens

<400>   32
```

Lys Ser Lys Arg Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val
1   5   10   15

Ala Val Ser Gln Ser Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr
            20   25   30

Gln Ile Asn Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Val Leu Val
        35   40   45

Cys Thr Cys Tyr Gly Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro
    50   55   60

Glu Ala Glu Glu Thr Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg
65   70   75   80

Val Gly Asp Thr Tyr Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys
            85   90   95

Thr Cys Ile Gly Ala Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn
            100   105   110

Arg Cys His Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg
        115   120   125

Arg Pro His Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly
    130   135   140

Asn Gly Lys Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe
145   150   155   160

Asp His Ala Ala Gly Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys
            165   170   175

Pro Tyr Gln Gly Trp Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly
            180   185   190

Ser Gly Arg Ile Thr Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp
        195   200   205

Thr Arg Thr Ser Tyr Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn
    210   215   220

Arg Gly Asn Leu Leu Gln Cys Ile Cys Thr Gly Asn Gly Arg Gly Glu
225   230   235   240

Trp Lys Cys Glu Arg His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser
            245   250   255

Gly Pro Phe Thr Asp Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His
            260   265   270

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Pro Gln Pro Pro Pro Tyr Gly His Cys Val Thr Asp Ser Gly Val Val
        275   280   285

Tyr Ser Val Gly Met Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met
    290   295   300

Leu Cys Thr Cys Leu Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val
305   310   315   320

Thr Gln Thr Tyr Gly Gly Asn Leu Asn Gly Glu Pro Cys Val Leu Pro
            325   330   335

Phe Thr Tyr Asn Gly Arg Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg
            340   345   350

Gln Asp Gly His Leu Trp Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp
        355   360   365

Gln Lys Tyr Ser Phe Cys Thr Asp His Thr Val Leu Val Gln Thr Gln
    370   375   380

Gly Gly Asn Ser Asn Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn
385   390   395   400

Asn His Asn Tyr Thr Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met
            405   410   415

Lys Trp Cys Gly Thr Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly
        420   425   430

Phe Cys Pro Met Ala Ala His Glu Glu Ile Cys Thr Thr Asn Glu Gly
        435   440   445

Val Met Tyr Arg Ile Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly
    450   455   460

His Met Met Arg Cys Thr Cys Val Gly Asn Gly Arg Gly Glu Trp Thr
465   470   475   480

Cys Ile Ala Tyr Ser Gln Leu Arg Asp Gln Cys Ile Val Asp Asp Ile
            485   490   495

Thr Tyr Asn Val Asn Asp Thr Phe His Lys Arg His Glu Glu Gly His
            500   505   510

Met Leu Asn Cys Thr Cys Phe Gly Gln Gly Arg Gly Arg Trp Lys Cys
    515   520   525

Asp Pro Val Asp Gln Cys Gln Asp Ser Glu Thr Gly Thr Phe Tyr Gln
    530   535   540

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Ile Gly Asp Ser Trp Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys
545   550   555   560

Tyr Cys Tyr Gly Arg Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln
            565   570   575

Thr Tyr Pro Ser Ser Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr
            580   585   590

Pro Ser Gln Pro Asn Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro
        595   600   605

Ser His Ile Ser Lys Tyr Ile Leu Arg Trp Arg Pro Lys Asn Ser Val
    610   615   620

Gly Arg Trp Lys Glu Ala Thr Ile Pro Gly His Leu Asn Ser Tyr Thr
625   630   635   640

Ile Lys Gly Leu Lys Pro Gly Val Val Tyr Glu Gly Gln Leu Ile Ser
            645   650   655

Ile Gln Gln Tyr Gly His Gln Glu Val Thr Arg Phe Asp Phe Thr Thr
            660   665   670

Thr Ser Thr Ser Thr Pro Val Thr Ser Asn Thr Val Thr Gly Glu Thr
    675   680   685

Thr Pro Phe Ser Pro Leu Val Ala Thr Ser Glu Ser Val Thr Glu Ile
    690   695   700

Thr Ala Ser Ser Phe Val Val Ser Trp Val Ser Ala Ser Asp Thr Val
705   710   715   720

Ser Gly Phe Arg Val Glu Tyr Glu Leu Ser Glu Glu Gly Asp Glu Pro
            725   730   735

Gln Tyr Leu Asp Leu Pro Ser Thr Ala Thr Ser Val Asn Ile Pro Asp
            740   745   750

Leu Leu Pro Gly Arg Lys Tyr Ile Val Asn Val Tyr Gln Ile Ser Glu
        755   760   765

Asp Gly Glu Gln Ser Leu Ile Leu Ser Thr Ser Gln Thr Thr Ala Pro
    770   775   780

Asp Ala Pro Pro Asp Pro Thr Val Asp Gln Val Asp Asp Thr Ser Ile
785   790   795   800

Val Val Arg Trp Ser Arg Pro Gln Ala Pro Ile Thr Gly Tyr Arg Ile
            805   810   815

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```
Val Tyr Ser Pro Ser Val Glu Gly Ser Ser Thr Glu Leu Asn Leu Pro
            820                 825             830


Glu Thr Ala Asn Ser Val Thr Leu Ser Asp Leu Gln Pro Gly Val Gln
        835                 840             845


Tyr Asn Ile Thr Ile Tyr Ala Val Glu Glu Asn Gln Glu Ser Thr Pro
    850                 855             860


Val Val Ile Gln Gln Glu Thr Thr Gly Thr Pro Arg Ser Asp Thr Val
865             870             875                 880


Pro Ser Pro Arg Asp Leu Gln Phe Val Glu Val Thr Asp Val Lys Val
            885                 890             895


Thr Ile Met Trp Thr Pro Pro Glu Ser Ala Val Thr Gly Tyr Arg Val
            900                 905             910


Asp Val Ile Pro Val Asn Leu Pro Gly Glu His Gly Gln Arg Leu Pro
        915                 920             925


Ile Ser Arg Asn Thr Phe Ala Glu Val Thr Gly Leu Ser Pro Gly Val
    930                 935             940


Thr Tyr Tyr Phe Lys Val Phe Ala Val Ser His Gly Arg Glu Ser Lys
945             950                 955             960


Pro Leu Thr Ala Gln Gln Thr Thr Lys Leu Asp Ala Pro Thr Asn Leu
            965                 970             975


Gln Phe Val Asn Glu Thr Asp Ser Thr Val Leu Val Arg Trp Thr Pro
        980                 985             990


Pro Arg Ala Gln Ile Thr Gly Tyr Arg Leu Thr Val Gly Leu Thr Arg
        995                 1000            1005


Arg Gly Gln Pro Arg Gln Tyr Asn Val Gly Pro Ser Val Ser Lys
    1010                1015            1020


Tyr Pro Leu Arg Asn Leu Gln Pro Ala Ser Glu Tyr Thr Val Ser
    1025                1030            1035


Leu Val Ala Ile Lys Gly Asn Gln Glu Ser Pro Lys Ala Thr Gly
    1040                1045            1050


Val Phe Thr Thr Leu Gln Pro Gly Ser Ser Ile Pro Pro Tyr Asn
    1055                1060            1065


Thr Glu Val Thr Glu Thr Thr Ile Val Ile Thr Trp Thr Pro Ala
    1070                1075            1080
```

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Pro Arg Ile Gly Phe Lys Leu Gly Val Arg Pro Ser Gln Gly Gly
    1085   1090   1095

Glu Ala Pro Arg Glu Val Thr Ser Asp Ser Gly Ser Ile Val Val
    1100   1105   1110

Ser Gly Leu Thr Pro Gly Val Glu Tyr Val Tyr Thr Ile Gln Val
    1115   1120   1125

Leu Arg Asp Gly Gln Glu Arg Asp Ala Pro Ile Val Asn Lys Val
    1130   1135   1140

Val Thr Pro Leu Ser Pro Pro Thr Asn Leu His Leu Glu Ala Asn
    1145   1150   1155

Pro Asp Thr Gly Val Leu Thr Val Ser Trp Glu Arg Ser Thr Thr
    1160   1165   1170

Pro Asp Ile Thr Gly Tyr Arg Ile Thr Thr Thr Pro Thr Asn Gly
    1175   1180   1185

Gln Gln Gly Asn Ser Leu Glu Glu Val Val His Ala Asp Gln Ser
    1190   1195   1200

Ser Cys Thr Phe Asp Asn Leu Ser Pro Gly Leu Glu Tyr Asn Val
    1205   1210   1215

Ser Val Tyr Thr Val Lys Asp Asp Lys Glu Ser Val Pro Ile Ser
    1220   1225   1230

Asp Thr Ile Ile Pro Ala Val Pro Pro Pro Thr Asp Leu Arg Phe
    1235   1240   1245

Thr Asn Ile Gly Pro Asp Thr Met Arg Val Thr Trp Ala Pro Pro
    1250   1255   1260

Pro Ser Ile Asp Leu Thr Asn Phe Leu Val Arg Tyr Ser Pro Val
    1265   1270   1275

Lys Asn Glu Glu Asp Val Ala Glu Leu Ser Ile Ser Pro Ser Asp
    1280   1285   1290

Asn Ala Val Val Leu Thr Asn Leu Leu Pro Gly Thr Glu Tyr Val
    1295   1300   1305

Val Ser Val Ser Ser Val Tyr Glu Gln His Glu Ser Thr Pro Leu
    1310   1315   1320

Arg Gly Arg Gln Lys Thr Gly Leu Asp Ser Pro Thr Gly Ile Asp
    1325   1330   1335

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```
Phe Ser Asp Ile Thr Ala Asn Ser Phe Thr Val His Trp Ile Ala
    1340              1345              1350

Pro Arg Ala Thr Ile Thr Gly Tyr Arg Ile Arg His His Pro Glu
    1355              1360              1365

His Phe Ser Gly Arg Pro Arg Glu Asp Arg Val Pro His Ser Arg
    1370              1375              1380

Asn Ser Ile Thr Leu Thr Asn Leu Thr Pro Gly Thr Glu Tyr Val
    1385              1390              1395

Val Ser Ile Val Ala Leu Asn Gly Arg Glu Glu Ser Pro Leu Leu
    1400              1405              1410

Ile Gly Gln Gln Ser Thr Val Ser Asp Val Pro Arg Asp Leu Glu
    1415              1420              1425

Val Val Ala Ala Thr Pro Thr Ser Leu Leu Ile Ser Trp Asp Ala
    1430              1435              1440

Pro Ala Val Thr Val Arg Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr
    1445              1450              1455

Gly Gly Asn Ser Pro Val Gln Glu Phe Thr Val Pro Gly Ser Lys
    1460              1465              1470

Ser Thr Ala Thr Ile Ser Gly Leu Lys Pro Gly Val Asp Tyr Thr
    1475              1480              1485

Ile Thr Val Tyr Ala Val Thr Gly Arg Gly Asp Ser Pro Ala Ser
    1490              1495              1500

Ser Lys Pro Ile Ser Ile Asn Tyr Arg Thr Glu Ile Asp Lys Pro
    1505              1510              1515

Ser Gln Met Gln Val Thr Asp Val Gln Asp Asn Ser Ile Ser Val
    1520              1525              1530

Lys Trp Leu Pro Ser Ser Ser Pro Val Thr Gly Tyr Arg Val Thr
    1535              1540              1545

Thr Thr Pro Lys Asn Gly Pro Gly Pro Thr Lys Thr Lys Thr Ala
    1550              1555              1560

Gly Pro Asp Gln Thr Glu Met Thr Ile Glu Gly Leu Gln Pro Thr
    1565              1570              1575

Val Glu Tyr Val Val Ser Val Tyr Ala Gln Asn Pro Ser Gly Glu
    1580              1585              1590
```

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Ser Gln Pro Leu Val Gln Thr Ala Val Thr Asn Ile Asp Arg Pro
    1595   1600   1605

Lys Gly Leu Ala Phe Thr Asp Val Asp Val Asp Ser Ile Lys Ile
    1610   1615   1620

Ala Trp Glu Ser Pro Gln Gly Gln Val Ser Arg Tyr Arg Val Thr
    1625   1630   1635

Tyr Ser Ser Pro Glu Asp Gly Ile His Glu Leu Phe Pro Ala Pro
    1640   1645   1650

Asp Gly Glu Glu Asp Thr Ala Glu Leu Gln Gly Leu Arg Pro Gly
    1655   1660   1665

Ser Glu Tyr Thr Val Ser Val Val Ala Leu His Asp Asp Met Glu
    1670   1675   1680

Ser Gln Pro Leu Ile Gly Thr Gln Ser Thr Ala Ile Pro Ala Pro
    1685   1690   1695

Thr Asp Leu Lys Phe Thr Gln Val Thr Pro Thr Ser Leu Ser Ala
    1700   1705   1710

Gln Trp Thr Pro Pro Asn Val Gln Leu Thr Gly Tyr Arg Val Arg
    1715   1720   1725

Val Thr Pro Lys Glu Lys Thr Gly Pro Met Lys Glu Ile Asn Leu
    1730   1735   1740

Ala Pro Asp Ser Ser Ser Val Val Val Ser Gly Leu Met Val Ala
    1745   1750   1755

Thr Lys Tyr Glu Val Ser Val Tyr Ala Leu Lys Asp Thr Leu Thr
    1760   1765   1770

Ser Arg Pro Ala Gln Gly Val Val Thr Thr Leu Glu Asn Val Ser
    1775   1780   1785

Pro Pro Arg Arg Ala Arg Val Thr Asp Ala Thr Glu Thr Thr Ile
    1790   1795   1800

Thr Ile Ser Trp Arg Thr Lys Thr Glu Thr Ile Thr Gly Phe Gln
    1805   1810   1815

Val Asp Ala Val Pro Ala Asn Gly Gln Thr Pro Ile Gln Arg Thr
    1820   1825   1830

Ile Lys Pro Asp Val Arg Ser Tyr Thr Ile Thr Gly Leu Gln Pro
    1835   1840   1845

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Gly Thr Asp Tyr Lys Ile Tyr Leu Tyr Thr Leu Asn Asp Asn Ala
    1850   1855   1860

Arg Ser Ser Pro Val Val Ile Asp Ala Ser Thr Ala Ile Asp Ala
    1865   1870   1875

Pro Ser Asn Leu Arg Phe Leu Ala Thr Thr Pro Asn Ser Leu Leu
    1880   1885   1890

Val Ser Trp Gln Pro Pro Arg Ala Arg Ile Thr Gly Tyr Ile Ile
    1895   1900   1905

Lys Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg
    1910   1915   1920

Pro Arg Pro Gly Val Thr Glu Ala Thr Ile Thr Gly Leu Glu Pro
    1925   1930   1935

Gly Thr Glu Tyr Thr Ile Tyr Val Ile Ala Leu Lys Asn Asn Gln
    1940   1945   1950

Lys Ser Glu Pro Leu Ile Gly Arg Lys Lys Thr Asp Glu Leu Pro
    1955   1960   1965

Gln Leu Val Thr Leu Pro His Pro Asn Leu His Gly Pro Glu Ile
    1970   1975   1980

Leu Asp Val Pro Ser Thr Val Gln Lys Thr Pro Phe Val Thr His
    1985   1990   1995

Pro Gly Tyr Asp Thr Gly Asn Gly Ile Gln Leu Pro Gly Thr Ser
    2000   2005   2010

Gly Gln Gln Pro Ser Val Gly Gln Gln Met Ile Phe Glu Glu His
    2015   2020   2025

Gly Phe Arg Arg Thr Thr Pro Pro Thr Thr Ala Thr Pro Ile Arg
    2030   2035   2040

His Arg Pro Arg Pro Tyr Pro Pro Asn Val Gly Gln Glu Ala Leu
    2045   2050   2055

Ser Gln Thr Thr Ile Ser Trp Ala Pro Phe Gln Asp Thr Ser Glu
    2060   2065   2070

Tyr Ile Ile Ser Cys His Pro Val Gly Thr Asp Glu Glu Pro Leu
    2075   2080   2085

Gln Phe Arg Val Pro Gly Thr Ser Thr Ser Ala Thr Leu Thr Gly
    2090   2095   2100

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Leu Thr Arg Gly Ala Thr Tyr Asn Ile Ile Val Glu Ala Leu Lys
    2105   2110   2115

Asp Gln Gln Arg His Lys Val Arg Glu Glu Val Val Thr Val Gly
    2120   2125   2130

Asn Ser Val Asn Glu Gly Leu Asn Gln Pro Thr Asp Asp Ser Cys
    2135   2140   2145

Phe Asp Pro Tyr Thr Val Ser His Tyr Ala Val Gly Asp Glu Trp
    2150   2155   2160

Glu Arg Met Ser Glu Ser Gly Phe Lys Leu Leu Cys Gln Cys Leu
    2165   2170   2175

Gly Phe Gly Ser Gly His Phe Arg Cys Asp Ser Ser Arg Trp Cys
    2180   2185   2190

His Asp Asn Gly Val Asn Tyr Lys Ile Gly Glu Lys Trp Asp Arg
    2195   2200   2205

Gln Gly Glu Asn Gly Gln Met Met Ser Cys Thr Cys Leu Gly Asn
    2210   2215   2220

Gly Lys Gly Glu Phe Lys Cys Asp Pro His Glu Ala Thr Cys Tyr
    2225   2230   2235

Asp Asp Gly Lys Thr Tyr His Val Gly Glu Gln Trp Gln Lys Glu
    2240   2245   2250

Tyr Leu Gly Ala Ile Cys Ser Cys Thr Cys Phe Gly Gly Gln Arg
    2255   2260   2265

Gly Trp Arg Cys Asp Asn Cys Arg Arg Pro Gly Gly Glu Pro Ser
    2270   2275   2280

Pro Glu Gly Thr Thr Gly Gln Ser Tyr Asn Gln Tyr Ser Gln Arg
    2285   2290   2295

Tyr His Gln Arg Thr Asn Thr Asn Val Asn Cys Pro Ile Glu Cys
    2300   2305   2310

Phe Met Pro Leu Asp Val Gln Ala Asp Arg Glu Asp Ser Arg Glu
    2315   2320   2325

<210> 33
<211> 280
<212> PRT
<213> Homo sapiens

<400> 33

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Met Leu Ser Ala Val Ala Arg Gly Tyr Gln Gly Trp Phe His Pro Cys
1               5                   10                  15


Ala Arg Leu Ser Val Arg Met Ser Ser Thr Gly Ile Asp Arg Lys Gly
            20                  25                  30


Val Leu Ala Asn Arg Val Ala Val Val Thr Gly Ser Thr Ser Gly Ile
        35                  40                  45


Gly Phe Ala Ile Ala Arg Arg Leu Ala Arg Asp Gly Ala His Val Val
    50                  55                  60


Ile Ser Ser Arg Lys Gln Gln Asn Val Asp Arg Ala Met Ala Lys Leu
65                  70                  75                  80


Gln Gly Glu Gly Leu Ser Val Ala Gly Ile Val Cys His Val Gly Lys
                85                  90                  95


Ala Glu Asp Arg Glu Gln Leu Val Ala Lys Ala Leu Glu His Cys Gly
            100                 105                 110


Gly Val Asp Phe Leu Val Cys Ser Ala Gly Val Asn Pro Leu Val Gly
            115                 120                 125


Ser Thr Leu Gly Thr Ser Glu Gln Ile Trp Asp Lys Ile Leu Ser Val
    130                 135                 140


Asn Val Lys Ser Pro Ala Leu Leu Leu Ser Gln Leu Leu Pro Tyr Met
145                 150                 155                 160


Glu Asn Arg Arg Gly Ala Val Ile Leu Val Ser Ser Ile Ala Ala Tyr
            165                 170                 175


Asn Pro Val Val Ala Leu Gly Val Tyr Asn Val Ser Lys Thr Ala Leu
            180                 185                 190


Leu Gly Leu Thr Arg Thr Leu Ala Leu Glu Leu Ala Pro Lys Asp Ile
    195                 200                 205


Arg Val Asn Cys Val Val Pro Gly Ile Ile Lys Thr Asp Phe Ser Lys
210                 215                 220


Val Phe His Gly Asn Glu Ser Leu Trp Lys Asn Phe Lys Glu His His
225                 230                 235                 240


Gln Leu Gln Arg Ile Gly Glu Ser Glu Asp Cys Ala Gly Ile Val Ser
            245                 250                 255


Phe Leu Cys Ser Pro Asp Ala Ser Tyr Val Asn Gly Glu Asn Ile Ala
            260                 265                 270
```

```
Val Ala Gly Tyr Ser Thr Arg Leu
        275             280


<210>   34
<211>   433
<212>   PRT
<213>   Homo sapiens

<400>   34

Met Ala Leu Arg Val Thr Arg Asn Ser Lys Ile Asn Ala Glu Asn Lys
1               5               10              15


Ala Lys Ile Asn Met Ala Gly Ala Lys Arg Val Pro Thr Ala Pro Ala
            20              25              30


Ala Thr Ser Lys Pro Gly Leu Arg Pro Arg Thr Ala Leu Gly Asp Ile
        35              40              45


Gly Asn Lys Val Ser Glu Gln Leu Gln Ala Lys Met Pro Met Lys Lys
        50              55              60


Glu Ala Lys Pro Ser Ala Thr Gly Lys Val Ile Asp Lys Lys Leu Pro
65              70              75              80


Lys Pro Leu Glu Lys Val Pro Met Leu Val Pro Val Pro Val Ser Glu
                85              90              95


Pro Val Pro Glu Pro Glu Pro Glu Pro Glu Pro Val Lys Glu
                100             105             110


Glu Lys Leu Ser Pro Glu Pro Ile Leu Val Asp Thr Ala Ser Pro Ser
        115             120             125


Pro Met Glu Thr Ser Gly Cys Ala Pro Ala Glu Glu Asp Leu Cys Gln
        130             135             140


Ala Phe Ser Asp Val Ile Leu Ala Val Asn Asp Val Asp Ala Glu Asp
145             150             155             160


Gly Ala Asp Pro Asn Leu Cys Ser Glu Tyr Val Lys Asp Ile Tyr Ala
            165             170             175


Tyr Leu Arg Gln Leu Glu Glu Glu Gln Ala Val Arg Pro Lys Tyr Leu
        180             185             190


Leu Gly Arg Glu Val Thr Gly Asn Met Arg Ala Ile Leu Ile Asp Trp
        195             200             205


Leu Val Gln Val Gln Met Lys Phe Arg Leu Leu Gln Glu Thr Met Tyr
        210             215             220


Met Thr Val Ser Ile Ile Asp Arg Phe Met Gln Asn Asn Cys Val Pro
```
                                Page 58

225   230   235   240

Lys Lys Met Leu Gln Leu Val Gly Val Thr Ala Met Phe Ile Ala Ser
                245   250   255

Lys Tyr Glu Glu Met Tyr Pro Pro Glu Ile Gly Asp Phe Ala Phe Val
                260   265   270

Thr Asp Asn Thr Tyr Thr Lys His Gln Ile Arg Gln Met Glu Met Lys
                275   280   285

Ile Leu Arg Ala Leu Asn Phe Gly Leu Gly Arg Pro Leu Pro Leu His
        290   295   300

Phe Leu Arg Arg Ala Ser Lys Ile Gly Glu Val Asp Val Glu Gln His
305   310   315   320

Thr Leu Ala Lys Tyr Leu Met Glu Leu Thr Met Leu Asp Tyr Asp Met
                325   330   335

Val His Phe Pro Pro Ser Gln Ile Ala Ala Gly Ala Phe Cys Leu Ala
                340   345   350

Leu Lys Ile Leu Asp Asn Gly Glu Trp Thr Pro Thr Leu Gln His Tyr
                355   360   365

Leu Ser Tyr Thr Glu Glu Ser Leu Leu Pro Val Met Gln His Leu Ala
        370   375   380

Lys Asn Val Val Met Val Asn Gln Gly Leu Thr Lys His Met Thr Val
385   390   395   400

Lys Asn Lys Tyr Ala Thr Ser Lys His Ala Lys Ile Ser Thr Leu Pro
                405   410   415

Gln Leu Asn Ser Ala Leu Val Gln Asp Leu Ala Lys Ala Val Ala Lys
                420   425   430

Val

<210>   35
<211>   1078
<212>   PRT
<213>   Homo sapiens

<400>   35

Met Ala Pro Arg Lys Arg Gly Gly Arg Gly Ile Ser Phe Ile Phe Cys
1   5   10   15

Cys Phe Arg Asn Asn Asp His Pro Glu Ile Thr Tyr Arg Leu Arg Asn
                20   25   30

```
Asp Ser Asn Phe Ala Leu Gln Thr Met Glu Pro Ala Leu Pro Met Pro
        35              40              45

Pro Val Glu Glu Leu Asp Val Met Phe Ser Glu Leu Val Asp Glu Leu
    50              55              60

Asp Leu Thr Asp Lys His Arg Glu Ala Met Phe Ala Leu Pro Ala Glu
65              70              75              80

Lys Lys Trp Gln Ile Tyr Cys Ser Lys Lys Asp Gln Glu Glu Asn
                85              90              95

Lys Gly Ala Thr Ser Trp Pro Glu Phe Tyr Ile Asp Gln Leu Asn Ser
            100             105             110

Met Ala Ala Arg Lys Ser Leu Leu Ala Leu Glu Lys Glu Glu Glu Glu
        115             120             125

Glu Arg Ser Lys Thr Ile Glu Ser Leu Lys Thr Ala Leu Arg Thr Lys
    130             135             140

Pro Met Arg Phe Val Thr Arg Phe Ile Asp Leu Asp Gly Leu Ser Cys
145             150             155             160

Ile Leu Asn Phe Leu Lys Thr Met Asp Tyr Glu Thr Ser Glu Ser Arg
                165             170             175

Ile His Thr Ser Leu Ile Gly Cys Ile Lys Ala Leu Met Asn Asn Ser
            180             185             190

Gln Gly Arg Ala His Val Leu Ala His Ser Glu Ser Ile Asn Val Ile
        195             200             205

Ala Gln Ser Leu Ser Thr Glu Asn Ile Lys Thr Lys Val Ala Val Leu
    210             215             220

Glu Ile Leu Gly Ala Val Cys Leu Val Pro Gly Gly His Lys Lys Val
225             230             235             240

Leu Gln Ala Met Leu His Tyr Gln Lys Tyr Ala Ser Glu Arg Thr Arg
            245             250             255

Phe Gln Thr Leu Ile Asn Asp Leu Asp Lys Ser Thr Gly Arg Tyr Arg
            260             265             270

Asp Glu Val Ser Leu Lys Thr Ala Ile Met Ser Phe Ile Asn Ala Val
    275             280             285

Leu Ser Gln Gly Ala Gly Val Glu Ser Leu Asp Phe Arg Leu His Leu
    290             295             300
```

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Arg Tyr Glu Phe Leu Met Leu Gly Ile Gln Pro Val Ile Asp Lys Leu
305   310   315   320

Arg Glu His Glu Asn Ser Thr Leu Asp Arg His Leu Asp Phe Phe Glu
                325   330   335

Met Leu Arg Asn Glu Asp Glu Leu Glu Phe Ala Lys Arg Phe Glu Leu
            340   345   350

Val His Ile Asp Thr Lys Ser Ala Thr Gln Met Phe Glu Leu Thr Arg
        355   360   365

Lys Arg Leu Thr His Ser Glu Ala Tyr Pro His Phe Met Ser Ile Leu
    370   375   380

His His Cys Leu Gln Met Pro Tyr Lys Arg Ser Gly Asn Thr Val Gln
385   390   395   400

Tyr Trp Leu Leu Leu Asp Arg Ile Ile Gln Gln Ile Val Ile Gln Asn
                405   410   415

Asp Lys Gly Gln Asp Pro Asp Ser Thr Pro Leu Glu Asn Phe Asn Ile
            420   425   430

Lys Asn Val Val Arg Met Leu Val Asn Glu Asn Glu Val Lys Gln Trp
        435   440   445

Lys Glu Gln Ala Glu Lys Met Arg Lys Glu His Asn Glu Leu Gln Gln
    450   455   460

Lys Leu Glu Lys Lys Glu Arg Glu Cys Asp Ala Lys Thr Gln Glu Lys
465   470   475   480

Glu Glu Met Met Gln Thr Leu Asn Lys Met Lys Glu Lys Leu Glu Lys
                485   490   495

Glu Thr Thr Glu His Lys Gln Val Lys Gln Gln Val Ala Asp Leu Thr
            500   505   510

Ala Gln Leu His Glu Leu Ser Arg Arg Ala Val Cys Ala Ser Ile Pro
    515   520   525

Gly Gly Pro Ser Pro Gly Ala Pro Gly Gly Pro Phe Pro Ser Ser Val
    530   535   540

Pro Gly Ser Leu Leu Pro Pro Pro Pro Pro Pro Leu Pro Gly Gly
545   550   555   560

Met Leu Pro Pro Pro Pro Pro Pro Leu Pro Pro Gly Gly Pro Pro Pro
                565   570   575

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Pro Pro Gly Pro Pro Pro Leu Gly Ala Ile Met Pro Pro Pro Gly Ala
            580   585   590

Pro Met Gly Leu Ala Leu Lys Lys Lys Ser Ile Pro Gln Pro Thr Asn
        595   600   605

Ala Leu Lys Ser Phe Asn Trp Ser Lys Leu Pro Glu Asn Lys Leu Glu
    610   615   620

Gly Thr Val Trp Thr Glu Ile Asp Asp Thr Lys Val Phe Lys Ile Leu
625   630   635   640

Asp Leu Glu Asp Leu Glu Arg Thr Phe Ser Ala Tyr Gln Arg Gln Gln
            645   650   655

Asp Phe Phe Val Asn Ser Asn Ser Lys Gln Lys Glu Ala Asp Ala Ile
            660   665   670

Asp Asp Thr Leu Ser Ser Lys Leu Lys Val Lys Glu Leu Ser Val Ile
        675   680   685

Asp Gly Arg Arg Ala Gln Asn Cys Asn Ile Leu Leu Ser Arg Leu Lys
    690   695   700

Leu Ser Asn Asp Glu Ile Lys Arg Ala Ile Leu Thr Met Asp Glu Gln
705   710   715   720

Glu Asp Leu Pro Lys Asp Met Leu Glu Gln Leu Leu Lys Phe Val Pro
            725   730   735

Glu Lys Ser Asp Ile Asp Leu Leu Glu Glu His Lys His Glu Leu Asp
            740   745   750

Arg Met Ala Lys Ala Asp Arg Phe Leu Phe Glu Met Ser Arg Ile Asn
        755   760   765

His Tyr Gln Gln Arg Leu Gln Ser Leu Tyr Phe Lys Lys Lys Phe Ala
    770   775   780

Glu Arg Val Ala Glu Val Lys Pro Lys Val Glu Ala Ile Arg Ser Gly
785   790   795   800

Ser Glu Glu Val Phe Arg Ser Gly Ala Leu Lys Gln Leu Leu Glu Val
            805   810   815

Val Leu Ala Phe Gly Asn Tyr Met Asn Lys Gly Gln Arg Gly Asn Ala
            820   825   830

Tyr Gly Phe Lys Ile Ser Ser Leu Asn Lys Ile Ala Asp Thr Lys Ser
        835   840   845

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Ser Ile Asp Lys Asn Ile Thr Leu Leu His Tyr Leu Ile Thr Ile Val
    850   855   860

Glu Asn Lys Tyr Pro Ser Val Leu Asn Leu Asn Glu Glu Leu Arg Asp
865   870   875   880

Ile Pro Gln Ala Ala Lys Val Asn Met Thr Glu Leu Asp Lys Glu Ile
            885   890   895

Ser Thr Leu Arg Ser Gly Leu Lys Ala Val Glu Thr Glu Leu Glu Tyr
            900   905   910

Gln Lys Ser Gln Pro Pro Gln Pro Gly Asp Lys Phe Val Ser Val Val
        915   920   925

Ser Gln Phe Ile Thr Val Ala Ser Phe Ser Phe Ser Asp Val Glu Asp
    930   935   940

Leu Leu Ala Glu Ala Lys Asp Leu Phe Thr Lys Ala Val Lys His Phe
945   950   955   960

Gly Glu Glu Ala Gly Lys Ile Gln Pro Asp Glu Phe Phe Gly Ile Phe
            965   970   975

Asp Gln Phe Leu Gln Ala Val Ser Glu Ala Lys Gln Glu Asn Glu Asn
            980   985   990

Met Arg Lys Lys Lys Glu Glu Glu Glu Arg Arg Ala Arg Met Glu Ala
        995   1000   1005

Gln Leu Lys Glu Gln Arg Glu Arg Glu Arg Lys Met Arg Lys Ala
    1010   1015   1020

Lys Glu Asn Ser Glu Glu Ser Gly Glu Phe Asp Asp Leu Val Ser
    1025   1030   1035

Ala Leu Arg Ser Gly Glu Val Phe Asp Lys Asp Leu Ser Lys Leu
    1040   1045   1050

Lys Arg Asn Arg Lys Arg Ile Thr Asn Gln Met Thr Asp Ser Ser
    1055   1060   1065

Arg Glu Arg Pro Ile Thr Lys Leu Asn Phe
    1070   1075

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<211> 179
<212> PRT
<213> Homo sapiens

<400> 36

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Met Val Leu Ala Trp Tyr Met Asp Asp Ala Pro Gly Asp Pro Arg Gln
1               5               10              15

Pro His Arg Pro Asp Pro Gly Arg Pro Val Gly Leu Glu Gln Leu Arg
            20              25              30

Arg Leu Gly Val Leu Tyr Trp Lys Leu Asp Ala Asp Lys Tyr Glu Asn
        35              40              45

Asp Pro Glu Leu Glu Lys Ile Arg Arg Glu Arg Asn Tyr Ser Trp Met
    50              55              60

Asp Ile Ile Thr Ile Cys Lys Asp Lys Leu Pro Asn Tyr Glu Glu Lys
65              70              75              80

Ile Lys Met Phe Tyr Glu Glu His Leu His Leu Asp Asp Glu Ile Arg
            85              90              95

Tyr Ile Leu Asp Gly Ser Gly Tyr Phe Asp Val Arg Asp Lys Glu Asp
            100             105             110

Gln Trp Ile Arg Ile Phe Met Glu Lys Gly Asp Met Val Thr Leu Pro
        115             120             125

Ala Gly Ile Tyr His Arg Phe Thr Val Asp Glu Lys Asn Tyr Thr Lys
    130             135             140

Ala Met Arg Leu Phe Val Gly Glu Pro Val Trp Thr Ala Tyr Asn Arg
145             150             155             160

Pro Ala Asp His Phe Glu Ala Arg Gly Gln Tyr Val Lys Phe Leu Ala
            165             170             175

Gln Thr Ala


<210>   37
<211>   142
<212>   PRT
<213>   Homo sapiens

<400>   37

Met Gly Ala Pro Thr Leu Pro Pro Ala Trp Gln Pro Phe Leu Lys Asp
1               5               10              15

His Arg Ile Ser Thr Phe Lys Asn Trp Pro Phe Leu Glu Gly Cys Ala
            20              25              30

Cys Thr Pro Glu Arg Met Ala Glu Ala Gly Phe Ile His Cys Pro Thr
        35              40              45
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Glu Asn Glu Pro Asp Leu Ala Gln Cys Phe Phe Cys Phe Lys Glu Leu
    50   55   60

Glu Gly Trp Glu Pro Asp Asp Asp Pro Ile Glu Glu His Lys Lys His
65   70   75   80

Ser Ser Gly Cys Ala Phe Leu Ser Val Lys Lys Gln Phe Glu Glu Leu
            85   90   95

Thr Leu Gly Glu Phe Leu Lys Leu Asp Arg Glu Arg Ala Lys Asn Lys
            100   105   110

Ile Ala Lys Glu Thr Asn Asn Lys Lys Lys Glu Phe Glu Glu Thr Ala
        115   120   125

Lys Lys Val Arg Arg Ala Ile Glu Gln Leu Ala Ala Met Asp
    130   135   140